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Subsidies issues in renewable energy trade

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Subsidies Issues in Renewable Energy Trade

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Abstract

The chapter analyzes several issues regarding the renewable energy subsidies in trade law. There are uncertainties regarding the WTO-consistence of renewable energy subsidies for goods. It is partially due to the vagueness of WTO rules and insufficient jurisprudence. Among them, issues such as the specificity of subsidies turn to be quite controversial. Given the unclear WTO disciplines on the susidies for goods, renewable energy subsidies for services could be more popular. The "collaboration" between the WTO law and FTAs is desirable to reform the WTO rules on trade remedies and to strike a balance between trade disciplines and environment protection. Professor Jaemin Lee has presented us with a superb chapter analyzing renewable energy subsides and the Agreement on Subsidies and Countervailing Measures (SCM Agreement), which is a highly technical and serious aspect of the interaction between trade and climate change (Lee 2016). In particular, his chapter does a great job of searching possible solutions under the norms of the World Trade Organization (WTO): renewable energy as national general infrastructure project, and renewable energy as non-specific projects. My comments will analyze some legal issues that deserve attention in addressing renewable energy subsidies in the multilateral and regional trade law. In my comments, I plan to discuss several topics: (i) the current state of the WTO disputes relating to renewable energy subsidies, based on an overview of WTO norms; (ii) the issue of renewable energy as "general infrastructure", (iii) the specificity or non-specificity of subsidies for renewable energy, and (iv) the role of free trade agreements (FTAs).

1 WTO Rules and Disputes Related to Renewable Subsidies

The landmark 2015 Paris climate accord is likely to trigger the investment towards zero-carbon energy sources,[1] and renewable energy trade may increase as well. Since enterprises such as start-up small businesses need funding to engage in renewable-energy-related activities, countries may turn to subsidies to fight climate change (e.g., subsidies conditional on the CO2 reduction). Currently fossil fuel subsidies continue to exceed those for renewable energy by a factor of more than four-to-one,[2] but renewable energy subsidies may increase in the future after the Paris climate change agreement. As found in the EU and Australia, governments may offset the negative effect of a domestic carbon price on energy-intensive trade-exposed industries to tackle competitiveness and carbon leakage concerns arising from imports from nations not pricing carbon.[3] There are different views towards renewable energy subsides. Renewable energy subsidies could be deemed to intervene the market. As adverse views, measures to encourage clean energy is not an intervention into a flawless market but an effort to offset current market distortions, and fossil fuel sector could be a recipient of a negative subsidy arising from the failure to price carbon emissions to reflect their climate change impacts.[4] In view of climate

[1] Coral Davenportdec, Nations Approve Landmark Climate Accord in Paris, The New York Times, Dec. 12, 2015. 2015.
[2] Tom Arup, Paris UN Climate Conference 2015: Australia rejects fossil fuel pledge, The Sydney Morning Herald, December 1, 2015.

[3] Joshua P. Meltzer, The Trans-Pacific Partnership Agreement, the Environment and Climate Change, in Trade Liberalisation and International Co-operation: A Legal Analysis of the Trans-Pacific Partnership Agreement 228, (Tania Voon ed. 2013).
[4] Id. at 227.

change, not all energy subsidies are harmful, and some may be needed to address the path dependency created by technology lock-in – the market dominance by an inferior technology (e.g., coal electricity generation).[5]

From the trade law perspective, the WTO-consistency issue needs to be taken into consideration in the design and implementation of subsidies on renewable energy. Domestic countervailing investigations have been taken regarding renewable energy subsidies, and disputes over renewable energy have arisen in the WTO dispute settlement system. For the former, the examples include China's countervailing duties on US solar-grade polysilicon,[6] and European Commission's probe into whether Chinese solar panel manufacturers had been provided with unfair subsidies, which continued after EU-China solar panel deal.[7] A typical one of the latter is India – Certain Measures Relating to Solar Cells and Solar Modules (India – Solar Cells) filed by the U.S., in which the panel seemingly ruled that India's federal solar program violates trade rules due to local-purchase requirements for solar cells and modules.[8] Pitifully, the panel report of this dispute has not been publicly released at the time of writing, and further analysis of this case will be meaningful. The European Union (EU) and Japan filed the Canada – Certain Measures Affecting the Renewable Energy Generation Sector (Canada – Renewable Energy), which targeted at Canada's measures concerning domestic content requirements in the feed-in tariff program and has been appealed to the Appellate Body. Moreover, as a WTO dispute that has not entered the panel proceedings, China requested the consultation with the EU, Greece and Italy regarding domestic content restrictions that affect the renewable energy generation sector concerning the feed-in tariff programs of EU member countries.[9] Up to now there is limited WTO jurisprudence on renewable energy subsidies.

Under the WTO law, a subsidy is deemed to exist if (i) there is a financial contribution by a government or public body, or income or price support in the sense of Article XVI of the General Agreement on Tariffs and Trade 1994 (GATT); and (ii) a benefit is conferred.[10] For instance, the free allowance of carbon emission to offset a domestic carbon price on energy-intensive industry may constitute a financial contribution and a benefit within the meaning of the SCM Agreement.[11] For the benefit comparison, the Appellate Body has indicated in Canada – Renewable Energy that it should be conducted in competitive markets for renewable energy that are created by the government definition of energy supply-mix.[12] The financial contribution by the government for renewable energy cannot "in and of itself" be deemed as conferring a benefit in the meaning of Article 1.1(b) of the Agreement on Subsidies and Countervailing Measures (SCM Agreement).[13] The Appellate Body's reasoning seems to favour renewable energy to some extent and the implications need to be observed in the long term.

Subsidies are expressly prohibited if they are contingent upon export performance or the use of domestic over imported goods.[14] Such contingency includes de jure and de facto ones, and it could be the sole condition or one of several other conditions.[15] Therefore, countries cannot make or maintain such prohibited subsidies[16] for renewable energy. The SCM Agreement's prohibition of domestic content requirements as a condition for a subsidy has been invoked in WTO disputes. Articles 3.1(b) and 3.2 of the SCM Agreement are among legal basis of the arguments of claimants in Canada – Renewable Energy and India – Solar Cells, and of China's arguments in its WTO consultation request with the EU regarding certain measures affecting renewable energy generation sector.[17] These measures in dispute are alleged to be prohibited subsidies.

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[5] Id. at 227.
[6] China Announces Anti-Subsidy Duties on US Solar-Grade Polysilicon, 17 Bridges (2013).
[7] EU-China Solar Panel Deal in Place; Subsidies Probe to Continue, 17 Bridges (2013).
[8] Rajesh Roy, WTO Panel Rules Against India's Solar Program, The Wall Street Journal, Sept. 1, 2015.
[9] European Union and Certain Member States – Certain Measures Affecting the Renewable Energy Generation Sector – Request for Consultations by China, 1–4 (2012).
[10] World Trade Organization, Agreement on Subsidies and Countervailing Measures, art. 1.1.
[11] Robert Howse, Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis, 9 (2010).
[12] Appellate Body Report, Canada – Certain Measures Affecting the Renewable Energy Generation Sector, WT/DS412/AB/R, WT/DS426/AB/R, para. 5.178.
[13] Id. at, para. 5.175.
[14] SCM Agreement, art. 3.1.
[15] SCM Agreement, art. 3.1.
[16] SCM Agreement, art. 3.2.
[17] European Union and Certain Member States – Certain Measures Affecting the Renewable Energy Generation Sector – Request for Consultations by China, 3, 2012.

Moreover, if subsidies are specific to certain enterprises or industries[18] and cause adverse effects to the interests of other Members,[19] they constitute actionable subsidies. In the most recent WTO dispute of India – Solar Cells, provisions of the SCM Agreement on actionable subsidies have been invoked (i.e. Articles 5(c), 6.3(a), and 6.3(c)), along with the rules on prohibited subsidies. The U.S. claimed in this dispute that the measures constitute actionable subsidies, which seemingly caused serious prejudice to the interests of the U.S. through displacement or lost sales of imports of U.S. products into India.[20] Claims based on actionable subsidies are likely to increase in the future, and the interpretation of WTO rules will be crucial.

2 Is Renewable Energy "General Infrastructure"?

Renewable energy helps to maintain the environment, but it remains an open question whether it constitutes "general infrastructure". The term of general infrastructure has been interpreted in European Communities – Measures Affecting Trade in Large Civil Aircraft (EC – Aircraft). Under Article 1.1(a)(1)(iii) of the SCM Agreement, general infrastructure is not a financial contribution, but infrastructure that is "other than general" is.[21] Although the provision of infrastructure usually have some public policy objectives, general infrastructure does not cover all infrastructure "fulfilling a public policy objective" to avoid rendering the word "general" inutile.[22] In the view of the panel in EC-Aircraft, no type of infrastructure, including railroads or electrical distribution systems, is "inherently 'general' per se".[23] In this dispute, the Appellate Body does not have a different position regarding this issue.

Based on the ordinary meaning, general infrastructure refers to infrastructure that is available to "all or nearly all entities" rather than a limited number of entities.[24] It is to be decided on a case-by-case basis, considering de jure or de facto limitations on access to the infrastructure.[25] A number of factors needs to be examined, including (i) circumstances of the creation of the infrastructure, (ii) the infrastructure type, (iii) the conditions of the infrastructure provision, (iv) the beneficiaries of the infrastructure, and (v) the law applicable to the infrastructure.[26] For the last consideration, one of the key issues is the limitation on access to or use of the infrastructure. The interpretation of general infrastructure would not be an easy exercise. On a related note, there could be a claim against electricity infrastructure, which may be difficult to succeed.[27]

3 Are Subsidies for Renewable Energy Specific?

Subsidies for renewable energy could avoid specificity and therefore are not inconsistent with the SCM Agreement. However, there exist considerable uncertainties. Article 2.1(a) of the SCM Agreement provides that the specificity exists when the access to the subsidy is explicitly limited to "certain enterprises". Since there is no definition of terms such as "certain enterprises" and "group of enterprises or industries", they can be implemented in a broad or narrow way that indicates political considerations instead of economic principle.[28]

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[18] SCM Agreement, art. 2.
[19] SCM Agreement, art. 5.
[20] India – Certain Measures Relating to Solar Cells and Solar Modules – Request for consultations by the United States 2 (2013).
[21] Appellate Body Report, European Communities – Measures Affecting Trade in Large Civil Aircraft, para. 963, WT/DS316/AB/R
[22] Panel Report, European Communities – Measures Affecting Trade in Large Civil Aircraft, WT/DS316/R, para 7.1038.
[23] Id. para. 7.1039.
[24] Id. para. 7.1036
[25] Id. para. 7.1039.
[26] Id. para. 7.1039.
[27] Luca Rubini, ASCM Disciplines and Recent WTO Case Law Developments: What Space for 'Green' Subsidies?, EUI Working Paper RSCAS 2015/03, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2553912
[28] Alan O. Sykes, The Questionable Case for Subsidies Regulation: A Comparative Perspective, Stanford University School of Law & Economics Research Paper Series Paper NO. 380, http://

Articles 2.1(b) and 2.1(c) of the SCM Agreement are also key provisions here as they deal with neutral non-specific subsidies and de facto specificity respectively. Under Article 2.1(b), the eligibility criteria of subsidies are deemed to be objective if they (i) are neutral, (ii) do not favor particular enterprises, and (iii) are economic ones and apply across the board (e.g. employee number, enterprise size).[29] Moreover, eligibility shall be automatic, and the criteria must be strictly implemented and clearly stated in rules for verification.[30] If all these conditions are met, the subsidies can avoid specificity. The focus of the inquiry in Articles 2.1(a) and 2.1(b) is the eligibility for a subsidy rather than whether certain enterprises did receive the subsidies.[31]

In theory, subsidies in renewable energy would not be regarded as specific if they meet these requirements. There are arguments that non-discriminatory energy saving subsidies that do not favor certain technologies could be deemed as non-specific,[32] and that subsidies in renewable energy would not be specific if their criteria are horizontal and neutral, such as those conditional on the adoption of a technology that provides a certain level of green house gas reduction.[33] One may also argue that subsidies provided to users of renewable energy are not specific under the SCM Agreement when they are available generally to all businesses.[34] In any case, the determination of specificity will be fact-specific.[35]

Even if the renewable energy subsidies gain non-specificity under Article 2.1(b) of the SCM Agreement, they are subject to Article 2.1(c) of the SCM Agreement that deals with the de facto specific cases. A number of other factors may be considered, including the use of subsidy program by a limited number of businesses, predominant use by certain firms, certain businesses obtaining disproportionately large amounts of subsidy, and the way in which the authorities use discretion in granting a subsidy (with particular emphasis on the consideration of information on grant application outcomes and the reasons of decisions).[36] As the verb "may" instead of "shall" is used, an authority could look at any rather than all of these four indicators of specificity here.[37] In this process, account shall be taken of the diversification of economic activities in the jurisdiction of the granting authorities, and the length of subsidy program operation time.[38] Generally the principles in Article 2.1 shall be interpreted together,[39] and the breadth or narrowness of specificity is not subject to rigid quantitative definition.[40] However, these WTO rules and jurisprudence are still fuzzy.

Regarding renewable energy subsidies, energy efficiency could be "de facto" specific to leaders of energy efficiency technologies or energy-intensive industries.[41] For instance, in analyzing the indicator of predominant use by certain enterprises, both the economic diversification and the subsidy program operation length matter.

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ssrn.com/abstract/1444605, 32.

[29] SCM Agreement, art. 2.1(b) and footnote 2.

[30] SCM Agreement, art. 2.1(b).

[31] Appellate Body Report, United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China, WT/DS379/AB/R, para 368.

[32] Sadeq Z. Bigdeli, Resurrecting the Dead? The Expired Non-Actionable Subsidies and the Lingering Question of 'Green Space', 8 Manchester Journal of International Economic Law 2, 22, 26 (2011).

[33] Daniel Peat, The Perfect FIT: Lessons for Renewable Energy Subsidies in the World Trade Organization, 1 LSU Journal of Energy Law and Resources, 56–57 (2012).

[34] Robert Howse, Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis, https://www.iisd.org/pdf/2009/bali_2_copenhagen_subsidies_legal.pdf, 13 (2010).

[35] See, e.g., Ilaria Espa and Sonia E. Rolland, Subsidies, Clean Energy, and Climate Change, http://e15initiative.org/publications/subsidies-clean-energy-and-climate-change/, 5 (A grant for the development of hydrogen fuel cells may not be specific due to the lack of a definable industry that is the beneficiary. In contrast, research and development subsidies to improve the efficiency of photovoltaic panels may be specific if they aim at solar panel corporations) (2015).

[36] SCM Agreement, art. 2.1(c) and footnote 3.

[37] Panel Report, United States – Final Countervailing Duty Determination with respect to certain Softwood Lumber from Canada, WT/DS257/R, para. 7.123.

[38] SCM Agreement, art. 2.1(c).

[39] Appellate Body Report, United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China, WT/DS379/AB/R, para 370.

[40] Panel Report, United States – Subsidies on Upland Cotton, WT/DS267/R, para 7.1142.

[41] Bigdeli, Manchester Journal of International Economic Law, 26 (2011).

Renewable energy subsidies should be available to a broader range of sectors when the subsidies are adopted by a highly diversified economy. If only limited industries benefit from the subsidy program in such an economy, it is more likely to indicate predominant use.[42] Same subsidy program in an economy made up of a few industries is not necessarily deemed as "predominant use" by certain industries.[43] Renewable energy subsidies are usually in operation for a relatively short time. In the same vein, this fact does not necessarily demonstrate the predominant use by certain businesses, since a new renewable energy program has not operated for sufficient time to assess its entire impact on the economy.[44] Meanwhile, it does not always need to make the decision until the entire life of a subsidy program ends. With operation time of renewable subsidy program passes by, the burden may increase for such program to prove its non-specificity.

Since de facto specific cases are prone to an intrinsic uncertainty given that nearly all subsidies regardless of their general availability may have a disproportionate effect on different businesses, one may argue that what matters is the inquiry into the object of the measure rather than the factors listed in Article 2.1(c) of the SCM Agreement.[45] Meanwhile, the interpretation of Article 2.1(c) should not go too far to render Article 2.1(b) redundant.

As WTO members could hardly reach a decision here, the jurisprudential uncertainty remains. Moreover, the WTO jurisprudence has indicated that the large number of businesses or sectors affected by a measure could be insufficient to prove that the subsidy is not specific.[46] In certain nations, energy-intensive industries may be highly disproportionate users of subsidies of free emission allowance, it may indicate as least a prima facie case of de facto specificity.[47] Since de facto specificity is unclear in the WTO jurisprudence, subsidies that are limited to few enterprises, or are provided as per objective criteria, could be specific.[48] There are arguments that subsidies for renewable energy may be specific, and that the design and breadth of measures are not so relevant given the clean energy industry remains one industry in the national economy.[49]

As indicated above, there are divergent views of the SCM Agreement regarding the specificity issue when it applies to renewable energy subsidies. From the legal perspective, a range of factors will be considered in analyzing the WTO-consistency of renewable energy subsidies. It will make it a difficult job to design a WTO-consistent subsidy program as uncertainty on the WTO rule interpretation remains. In practice, countries may also encounter difficulties such as political and financial viability of extending a general subsidy to all economic sectors, costly administrative burden of maintaining a WTO-consistent subsidy, which may not be an easy job even for developed countries.[50]

4 The Possible Role of FTAs

WTO trade remedies rules need to be reformed to mitigate the environmental damage due to green industrial policy disputes.[51] As the WTO rulemaking encounters difficulties for quite some time, countries may regard the FTAs, particularly larger or mega ones, as possible options to address the issue of renewable energy subsidies. The WTO may be spurred into action by these FTA rules if properly managed. It may require new FTA rules that go beyond the SCM Agreement. However, bilateral FTAs are more likely to follow the WTO rules and are less likely to develop new rules regarding the subsidies in sustainable energy. Even for the mega FTA, it seems

[42] EC and certain member States – Large Civil Aircraft, at para. 7.975.
[43] Id. para. 7.975.
[44] Id. para. 7.976.
[45] Bigdeli, Manchester Journal of International Economic Law, 21 (2011).
[46] Luca Rubini, Ain't Wastin' Time no More: Subsidies for Renewable Energy, the SCM Agreement, Policy Space, and Law Reform, 15 Journal of International Economic Law 525, 548 (2012).
[47] Howse, 9 (2010).
[48] Aaron Cosbey and Petros C. Mavroidis, A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: the Case for Redrafting the Subsidies Agreement of the WTO, EUI Working Paper RSCAS 2014/17, 18 (2014).
[49] Rubini, Journal of International Economic Law, 548–549 (2012).
[50] Peat, LSU Journal of Energy Law and Resources, 57–58 (2012).
[51] Mark Wu & James Salzman, The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy, 108 Northwestern University Law Review 401, 474 (2014).

that the Trans-Pacific Partnership Agreement (TPP) has not made much progress regarding renewable energy subsides in its rules on trade remedies.

The FTA may set disciplines for services subsides and strike a balance between climate change and trade liberalization. Services subsidies are not subject to strict disciplines under the WTO norm. For instance, subsidies to waste treatment as a service fall outside the SCM Agreement, and waste treatment could be an essential part of bioenergy production.[52] Countries may choose service subsidies on renewable energy, and subsidies for goods may be transformed to subsidies for services.

In the future, the FTAs may also encounter difficulties. One thorny question is whether the FTA may legitimize WTO-inconsistent subsides on renewable energy in trade in goods. It reflects the delicate relationship between multilateral and regional trade law.

5 Conclusion

As the multilateral trade system is difficult to produce new rules regarding renewable energy subsidies in the short run, the WTO-legality of the renewable energy subsidy would be a matter of interpretation. A turn to the interpretation of WTO rules (including the relationship between letters (b) and (c) of the SCM Agreement Article 2.1) offers some promise. The arguments of the renewable energy programs as general infrastructure projects and their non-specificity are quite useful in balancing trade and environment. It also provides a perspective that deserves more attention in the future WTO jurisprudence. Meanwhile, there are different views regarding renewable energy subsidies that deserve attention.

The tension may exist between trade law and renewable energy subsidies from the perspective of rules on subsidies. On the one hand, there is a lack of explicit textual support in WTO norms for subsides in renewable energy. On the other hand, renewable energy subsidies programs have often been adopted by subnational governments who are less capable of taking into account WTO rules in their design compared with national governments.[53] The analysis of WTO-consistency of renewable energy subsidies probably could only be conducted on a case-by-case basis, and the arguments related to WTO subsidy rules could be made in different ways. Some observations could be made here.

First, renewable energy subsidies for goods may not necessarily be consistent with the SCM Agreement. Their design and implementation is crucial. Not all infrastructures are “general”, and uncertainty in the rule interpretation can hardly be eliminated. Renewable energy subsidies could be argued to be “specific”, if renewable energy is compared with traditional energy, energy-intensive industries compared with other industries. In practice, WTO members may encounter difficulties in implementing WTO-consistent general subsidies that evade specificity. The political, financial and other inputs are needed to make them happen. It may be quite challenging to provide renewable energy subsidies as a general infrastructure given the funding capacity limit of countries.

Second, WTO rule interpretation cannot go too far and the rule making at the WTO is encountering difficulties. It makes the “collaboration” between the WTO law and FTAs desirable. The FTA rules and their interpretation could base on and reform the counterpart of the WTO. FTAs may have a role in addressing renewable energy subsidies for goods. Given the legal uncertainty of renewable energy subsides for goods under the WTO law, it may lead to the consideration of subsidies for relevant service and service suppliers. FTAs could also develop rules to restrict unwarranted renewable energy subsidies for services.

Last but not least, a number of questions need to be answered including the following ones: how should Article 2.1(c) be interpreted to give effect to Article 2.1(b) of the SCM Agreement? What is the role of the FTAs including mega FTAs regarding the relationship between trade and renewable energy? Should services subsidies remain outside the reach of trade disciplines? In the end, the trade regime should seek the proper way of

[52] Bigdeli, Manchester Journal of International Economic Law, 22 and footnote 88 (2011).
[53] Timothy Meyer, Energy Subsidies and the World Trade Organization, 17 ASIL Insights (2013).

supporting policy autonomy (e.g. measures to promote energy efficiency and encourage the use of renewable energy) and curbing disguised trade protection.

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